

Practicing the Smart Grid



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new networks of power

Smart grids:

- a (third) wave of household electrification
- new “active” roles for end-users (are we passive?)

wanted: an empowered & informed citizen-prosumer

“empower citizens, as consumers, to make sustainable environmental choices”. (EC, 2007)

“only consumers who are aware of the benefits of energy efficiency and are empowered to make informed choices can be drivers for change” (EC, 2009)

the ABC of policy intervention

A: attitudes

B: behavior

C: consumer choices

Have limited support from empirical studies on what, how and why people do what they do.

a social practice perspective

an alternative to deficit-based explanatory models

focuses on bundles of activities that make sense to us
in terms of different practices, e.g. cooking,
cleaning, gardening...

these practices are constituted by stuffs, skills and
meaning

smart grid practices

what stuffs, skills and meanings does the smart grid require?

Stuffs –

Skills –

Meaning –

smart grid practices

what stuffs, skills and meanings does the smart grid require?

Stuffs – smart stuff (ICT)

Skills –

Meaning –

smart grid practices

what stuffs, skills and meanings does the smart grid require?

Stuffs – smart stuff (ICT)

Skills – managing the smart stuff

Meaning –

smart grid practices

what stuffs, skills and meanings does the smart grid require?

Stuffs – smart stuff (ICT)

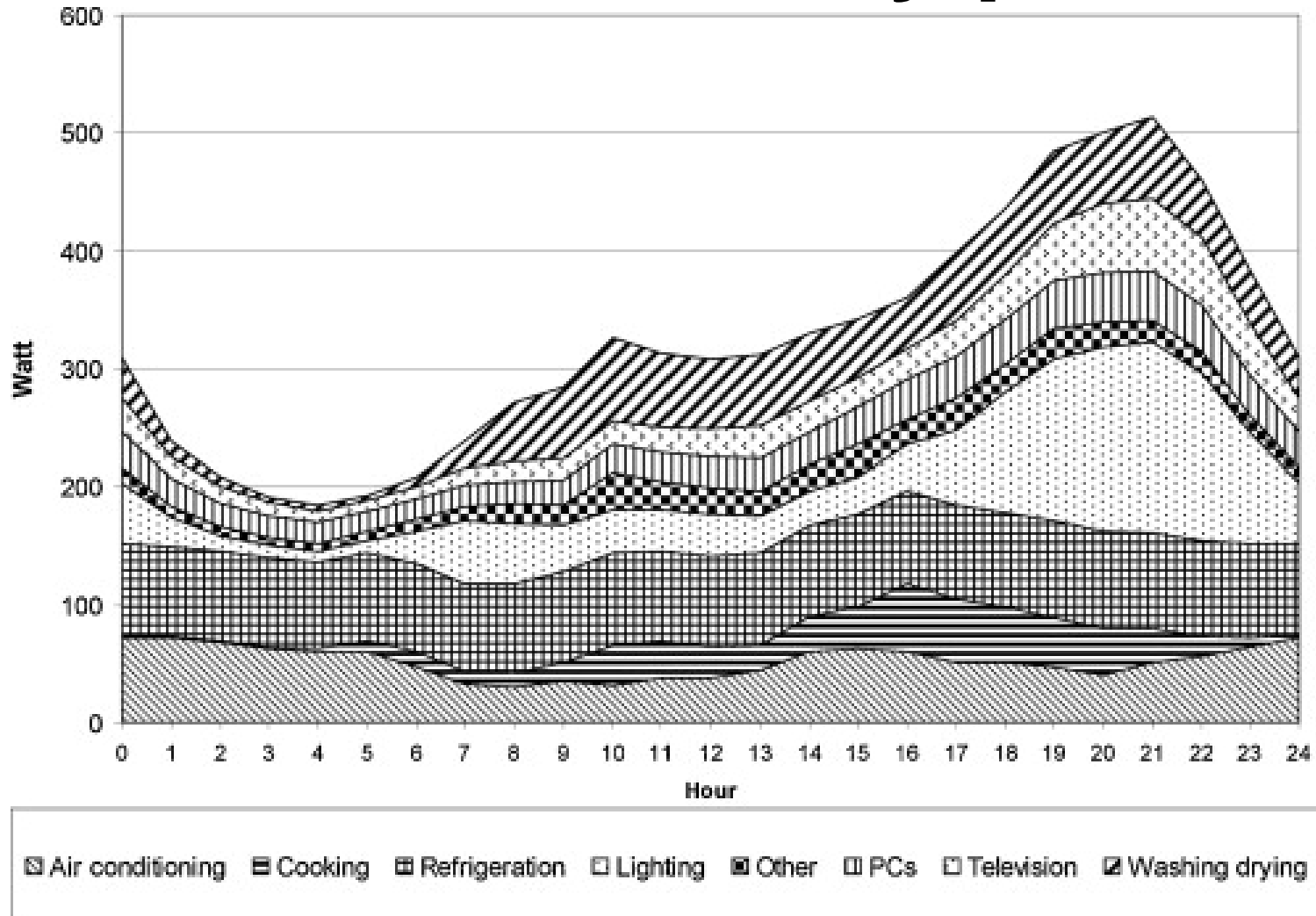
Skills – managing the smart stuff

Meaning – modern? environmentally concerned?

smart grid practices

One example: Peak load management through smart laundry

household electricity peaks



de Almeida, A. et al. (2011): Characterization of the household electricity consumption in the EU, potential energy savings and specific policy recommendations. Energy and Buildings. 43. 1884–1894

smart grid practices

One example: Peak load management through smart laundry

What activities can be shifted in time?

What does this demand from the household?

What does this imply for the total energy use?

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Thank you!

